

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/328,007

REMARKS

Summary Of The Office Action

Claims 1-5 are pending in the application.

Claims 1-2 are rejected under 35 U.S.C. § 103 as being unpatentable over Song (U.S. Patent 5,539,467) in view of Hashimoto (U.S. 5,608,459).

Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Song and Hashimoto in view of Richards (U.S. Patent 5,392,071).

Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Analysis of the Claim Rejections

In rejecting claims 1-2 as being unpatentable over Song in view of Hashimoto, the Examiner continues to assert that Song “has storage of the B-frame data” (Office Action, page 3, line 10). This assertion notwithstanding, the Examiner concedes that Song does not specifically disclose the storage of the B-frame, but relies on Hashimoto as teaching this feature (Office Action, page 3, lines 10-16). The Examiner specifically cites elements 44 of Fig. 1 of Hashimoto as teaching B-picture storage. The Examiner concludes that it would have been obvious “to take the teachings of Song and Hashimoto as a whole for storing B-frame picture data in B-frame picture memory so as to permit efficient, quick retrieval of B-frame data as necessary for high quality image display.

The Examiner also states:

[T]he combination of Song and Hashimoto is reasonable and valid because both references pertain to the same MPEG image processing ambiance. Further, to one of ordinary skill in the art, it is notoriously well known to store B-frame or bi-directional picture data in a B-frame memory since that is what data memory is for. Moreover, the storage of B-frames or any frame type is not novel, special, unique or patentable feature, because any one of ordinary skill in the art can apply the simple modification of storing image data in any number, arrangement of memory units for the purpose of storing image data. Thus, clearly, B-frame memory is not a patentable feature.

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Applicant respectfully disagrees with the Examiner's analysis for at least the following reasons.

With respect to the Examiner's statement that "the storage of B-frames of any frame type is not novel, special, unique or patentable feature because any one of ordinary skill in the art can apply the simple modification of storing image data in any number, arrangement of memory units for the purpose of storing image data", Applicant respectfully submits that the Examiner's analysis is not proper. In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983). Thus, the test for patentability is not whether the storage of B-frames is novel, special or unique, but whether the claimed invention, as a whole, is rendered obvious by the references cited by the Examiner. Merely to isolate B-frame memory and assert that this is not a patentable feature is not permissible. Rather, the invention, as a whole, must be considered.

With respect to the Examiner's statement that "it would have been obvious to one of ordinary skill in the art to take the teachings of Song and Hashimoto as a whole for storing B-frame picture data in B-frame picture memory so as to permit efficient, quick retrieval of B-frame data as necessary for high quality image display", Applicant respectfully submits that this analysis is also incorrect.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of

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ordinary skill in the art, to modify the reference or to combine reference teachings. In the present case, the Examiner's asserted reasons for combining the teachings of Song and Hashimoto are deficient. Song operates so as to output B-frame signals as they are input. There is no reason to modify Song to store B-frame picture data. The Examiner asserts that storing B-frame picture data by Song would permit efficient, quick retrieval of B-frame data necessary for high quality image display. However, since Song is configured to output B-frame picture data as it is received, it is not clear how the advantages asserted by the Examiner would be achieved. That is, it is not clear how storing B-frame data in the apparatus of Song et al would promote efficiency or high quality image display. Moreover, including B-frame data storage is contrary to the main objective of Song et al of reducing memory capacity. Applicant notes that at col. 1, lines 9-16, Song et al states:

The present invention relates to an apparatus for processing I, P and B-frames for an image decoder adapted to a video appliance such as a high definition television (hereinafter referred to as HDTV), and more particularly, *to an apparatus which can reduce memory capacity for processing B-frame and perform image motion compensation in the unit of a half pixel for B-frame, thereby obtaining a high definition picture.*

(Emphasis added).

Thus, because Song et al specifically seeks to reduce memory capacity for processing B-frame data, and because it is not clear how providing B-frame storage capacity in Song et al

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would improve the device of Song et al, Applicant does not believe that there is any suggestion or motivation in the references for making the combination proposed by the Examiner.

For at least the above reasons, Applicant submits that the combination defined by claim 1 is not obvious in view of Song et al and Hashimoto.

Applicant also submits that claim 2 patentably distinguishes over the combination of Song et al and Hashimoto at least by virtue of its dependency from claim 1, and that claim 3 is patentably distinguishable over Song, Hashimoto and Richards, at least by virtue of its dependency from claim 1 and because Richards does not make up for the deficiencies of Song and Hashimoto which were cited above.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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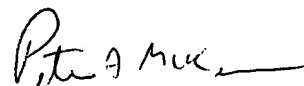
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